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BC	2.	WO 98/37180	08/27/98	WIPO		_				
	3.	WO 99/04008	01/28/99	WIPO	_	,				
	4.	WO 99/28482	06/10/99	WIPO	_					
	5.	WO 01/38360	05/31/01	WIPO		- \				
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)					
BLi	Hahm et al., "NS3-4A of Hepatitis C Virus is a Chymotrypsin-Like Protease," Journal of Virology, The American So for Microbiology, 69(4):2534-2539 (1995).					

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY, DOCKET NO. TRIPEP.23AUSC2 APPLICATION NO. 10/719,619

MATION DISCLOSURE STATEMENT BY APPLICANT

APPLICANT
Sällberg et al.

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FILING DATE November 20, 2003 GROUP Unknown

				U.S. PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CL	ASS	SUBC	LASS	FILING DATE (IF APPROPRIATE)
BLi	1	4,946,778	08/07/90	Ladner et al.		_	1		
	2	4,950,647	08/21/90	Robins et al.			1		
	3	5,350,671	09/27/94	Houghton et al.					
	4	5,371,017	12/06/94	Houghton et al.					
	5	5,372,928	12/13/94	Miyamura et al.					
	6	5,585;258	12/17/96	Houghton et al.					
	7	5,589,466	12/31/96	Felgner et al.		T			
	8	5,597,691	01/28/97	Houghton et al.					
	9	5,670,152	09/23/97	Weiner et al.		Τ			
	10	5,670,153	09/23/97	Weiner et al.					
	11	5,679,342	10/21/97	Houghton et al.					
	12	5,683,864	11/04/97	Houghton et al.					
	13	5,698,390	12/16/97	Houghton et al.					
	14	5,712,087	01/27/98	Houghton et al.					
	15	5,712,088	01/27/98	Houghton et al.					· · · · · · · · · · · · · · · · · · ·
	16	5,712,145	01/27/98	Houghton et al.					
	17	5,714,596	02/03/98	Houghton et al.					
	18	5,728,520	03/17/98	Weiner et al.					
	19	5,756,312	03/26/98	Weiner et al.					
	20	5,766,845	06/16/98	Weiner et al.					
	21	5,767,097	06/16/98	Tam					
	22	5,856,437	01/05/99	Miyamura et al.					
	23	5,863,719	01/26/01	Houghton et al.					
	24	5,871,903	02/16/99	Miyamura et al.					
	25	5,885,799	03/23/99	Houghton et al.					
	26	5,932,556	08/03/99	Tam					
	27	5,942,234	08/24/99	Ralston et al.					
	28	5,959,092	09/28/99	Miyamura et al.					· · · · · · · · · · · · · · · · · · ·
	29	5,968,775	10/18/99	Houghton et al.		∇		/	· · · · · · · · · · · · · · · · · · ·
V	30	5,989,905	11/23/99	Houghton et al.	7	/	1	7	

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. TRIPEP.23AUSC2 APPLICATION NO. 10/719,619

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

APPLICANT Sällberg et al.

November 20, 2003

VERAL SHEETS IF NECESSARY)
FILING DATE

GROUP Unknown

U.S. PATENT DOCUMENTS DOCUMENT NUMBER CLASS SUBCLASS FILING DATE DATE NAME **EXAMINER** INITIAL (IF APPROPRIATE) 02/22/00 | Houghton et al. 31 6,027,729 32 6,056,961 05/02/00 Lavie et al. 33 6,060,068 05/09/00 Doyle et al. 34 05/16/00 Chedid et al. 6,063,380 35 6,063,772 05/16/00 Tam 36 06/06/00 Cha et al. 6,071,693 37 6,074,816 06/13/00 | Houghton et al. 38 6,074,846 06/13/00 Raiston et al. 39 6,074,852 06/13/00 Ralston et al. 40 6,096,541 08/01/00 | Houghton et al. 41 6,130,326 10/10/00 Ramasamy et al. 42 6,150,087 11/21/00 Chien 43 6,150,337 11/21/00 Tam 44 6,171,782 01/09/01 Houghton et al. 45 6,190,864 02/20/01 Cha et al. 46 6,194,140 02/27/01 | Houghton et al. 47 6,214,583 04/10/01 | Cha et al. 48 6,235,888 05/22/01 Pachuk et al. 49 6,274,148 08/14/01 Ralston et al. 50 6,297,370 10/02/01 Cha et al. 51 6.303.292 10/16/01 | Weiner et al. 52 6.312.889 11/06/01 Houghton et al. 53 6,514,731 02/04/03 Valenzuela et al. 54 6,541,011 04/01/03 | Punnonen et al. 55 6,555,114 04/29/03 Leroux-Roels et al. 56 2002/0004048 01/10/02 Raiston et al. Sallberg et al. 57 2002/0165172 A1 11/07/02 58 2002/0183508 A1 12/05/02 Maertens et al. 59 2002/0187945 A1 12/12/02 Tam 60 2003/0007977 01/09/03 Wheeler et al.

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*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

APPLICANT
Sällberg et al.

FILING DATE
November 20, 2003

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APPLICATION NO.
10/719,619

APPLICANT
Sällberg et al.

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U.S. PATENT DOCUMENTS									
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)		
BLi	61	2003/0008274	01/09/03	Maertens et al.)			
	62	2003/0032005	02/13/03	Maertens et al.]				
	63	2003/0044774	03/06/03	Valenzuela et al.					
V /	64	2003/0064360	04/03/03	Maertens et al.					

				FOREIGN PATENT DOCUMENTS						
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	66	EP 0 414 475	02/27/91	European Patent Office		1				
	67	WO 91/15575	10/17/91	WIPO		\perp				
	68	WO 92/19743	11/12/92	WIPO						
	69	WO 93/00365	01/07/93	WIPO		T				
	70	WO 93/06126	04/01/93	WIPO						
	71	WO 94/16737	08/07/94	WIPO		T				
	72	EP 0 450 931	06/12/96	European Patent Office		1				
	73	WO 96/28162	09/19/96	WIPO		T				
	74	WO 97/12043	04/03/97	WIPO						
	75	EP 0 543 924	06/18/97	European Patent Office						
	76	WO 97/26883	07/31/97	WIPO					<u> </u>	
	77	WO 98/16184	04/23/98	WIPO						
	78	WO 98/16186	04/23/98	WIPO .						1
	79	EP 0 842 947	05/20/98	European Patent Office						
	80	WO 98/30223	07/16/98	WIPO						
	81	EP 0 693 687	07/28/99	European Patent Office						
	82	EP 0 556 292	12/29/99	European Patent Office						
	83	WO 00/44388	08/03/00	WIPO						
	84	EP 1 034 785	09/13/00	European Patent Office		1		1,		
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	86	EP 0 398 748	01/09/02	European Patent Office							
	87	WO 02/13855	02/21/02	WIPO							
	88	WO 02/14362	02/21/02	WIPO							

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
BLI	89	AASLD Abstracts 940, "Hepatitis C Virus NS5A Sequence Confirugation does not Predict Response to Induction Interferon Plus Ribavirin," <i>Hepatology</i> , p. 394A (2000).
	90	Abrignani et al., "Perspectives for a vaccine against hepatitis C virus," Journal of Hepatology, 31: (suppl. 1):259-263 (1999).
	91	Bartenschlager et al., "Substrate Determinants for Cleavage in cis and in trans by the Hapatitis C Virus NS3 Proteinase," <i>Journal of Virology</i> , pp. 198 – 205, (1995).
	92	Chen et al., "Human and Murine Antibody Recognition is Focused on the ATPase/Helicase, but not the Protease Domain of the Hepatitis C Virus Nonstructural 3 Protein," <i>Hepatology</i> , 28(1):219-224 (1998).
	93	Chen et al., "Detection of Hepatitis C Virus RNA in the Cell Fraction of Saliva Before and After Oral Surgery," J. Med. Virol., 43:223-226 (1995).
	94	Chiang et al., "Enhancement of hepatitis C virus core antigen-specific type 1 T helper cell response by ribavirin correlates with the increased level of IL-2," Vaccine Strategies Against Microbial Pathogens, 42.11-42.16, p. A949 (date unknown).
	95	Cotonat et al., "Pilot Study of Combination Therapy with Ribavirin and Interferon Alfa for the Retreatment of Chronic Hepatitis B e Antibody-Positive Patients," <i>Hepatology</i> , 31(2):502-506 (2000).
	96	Cramp et al., "Hepatitis C Virus-Specific T-Cell Reactivity During Intereron and Ribavirin Treatment in Chronic Hepatitis C," Gastron. Enterol., 118:346-355 (2000)
	97	Encke et al., "DNA Vaccines," Intervirology, 42:117-124, (1999)
	98	Encke et al., "Genetic Immunization Generates Cellular and Humoral Immune Responses Against the Nonstructural Proteins of the Hepatitis C Virus in a Murine Model", Journal of Immunology, 161:4917-4923 (1998).
	99	Diepolder et al., "Possible mechanism involving T-lymphocyte response to non-structural protein 3 in viral clearance in acute hepatitis C virus infection," Lancet, 346(8981):1006-1007.
	100	Fang et al., "Ribavirin enhancement of hepatitis C virus core antigen-specific type 1 T helper cell response correlates with the increased IL-12 level," <i>Journal of Hepatology</i> , 33(5):791-798 (2000).
	101	Forms et al., "Hepatitis C virus lacking the hypervariable region 1 of the second envelope protein is infectious and causes acute resalving or persistent infection in chimpanzees," PNAS, vol. 97, no. 24, pp. 13318-113323, (2000).
	102	Gordon et al., "Immune responses to hepatitis C virus structural and nonstructural proteins induced byplasmid DNA immunizations," <i>Journal of Infectious Diseases</i> , 181(1):42-50.
	103	Grakoui et al., "A second hepatitis C virus-encoded proteinase," <i>Proc. Natl. Acad. Sci USA</i> , 90:10583-10587, (1993).
	104	Hsu et al., "Prospects for a Hepatitis C Virus Vaccine", Clin Liver Dis, 3(4):901-915 (1999).
	105	Huffman et al., "In vitro effect of 1-beta-D-ribofuranosyl-1,2,4-triazole-3-carboxamide (virazole, ICN 1229) on deoxyribonucleic acid and ribonucleic acid viruses," <i>Antimicrob. Agents. Chemother.</i> , 3(2):235 (1973).
	106	Hultgren et al., J. Gen. Virol., 79:2381-2391 (1998)
/	107	Jin et al., "Expression, isolation, and characterization of the hepatitis C virus ATPase/RNA Helicase," Arch. Biochem. Bioplys., 323:47-53 (1995).
7	108	Kakumu et al., "Pilot Study of Ribarvirin and Interferon- for Chronic Hepatitis B," Hepatology, 18(2):258-263 (1993).

EXAMINER	Burgunt.	DATE CONSIDERED	02/21/2006
*EXAMINER: I	INITIAL IF CITATION CONSIDERED, WHETHER OR NOT NACE AND NOT CONSIDERED, INCLUDE COPY OF THIS	CITATION IS IN CONFORMANCE WITH N 5 FORM WITH NEXT COMMUNICATION TO	APEP 609; DRAW LINE THROUGH CITATION IF NOT O APPLICANT.

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE APPLICATION NO. FORM PTO-1449 ATTY. DOCKET NO. TRIPEP.23AUSC2 10/719,619 INFORMATION DISCLOSURE STATEMENT BY APPLICANT DEC 1 5 2003 **APPLICANT** Sällberg et al. SEVERAL SHEETS IF NECESSARY) **GROUP** FILING DATE November 20, 2003 Unknown

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
BC'C	109	Kato, "Genome of human hepatitis C virus (HCV) Com. Genomics, 5(3):129-151 (2000).	egene organization, sequence diversity, and variation," Microb.	
	110		itution of an HCV genome from a British isolate derived from a 7:459-465 (2000).	
	111	Kwong et al., "Hepatitis C virus NS3/4A protease	," Antiviral Res., 41(1):67-84 (1999).	
	112	Kwong et al., "Structure and function of hepatitis (2000).	C virus NS3 helicase," Curr. Top. Microbiol. Immunol., 242:171-19	
	113	Lawrence et al., "Advances in the treatment of he	epatitis C," Adv. Intern. Med., 45:65-105 (2000).	
	114	(2000).	Rac2 in T helper 1 cell differentiation," Science, 288:2219-2222	
	115	113, (1999).		
	116	(1987).	liator release," J. Pharmacol. Exp. Therapeutics, 240(1):145-149	
	117	Applications, 4(2):80-84 (1994).	ymmetric gap ligase chain reaction," PCR Methods and	
	118	Dermatology, 34(9):597-606 (1995).	r; Current Status and Future Prospects," Internation Journal of	
	119	Missale et al., "Different clinical behaviours of act the anti-viral cell-mediaated immune response,".	ute hepatitis C virus infection are associated with different vigor of J. Clin. Invest., 98(3):706-714 (1996).	
	120 Neuberger et al., "Recombinant antibodies possessing novel effector functions," Nature, 312:604-608 (198			
	121	Supp. 6, 1:36-40 (1999).	for clearance and control of hepatitls C virus," J. Viral. Hepat.,	
	122	(1981).	cell responses in vivo by ribavirin," J. Immunology, 126(3):861-86	
	123	Chemother., 22(1):108-114 (1982).	mphocyte subpopulations by ribavirin," Antimicrob. Agents.	
	124	Microbiology, 38(8):3125-3127 (2000).	us Infections in an Intravenous Drug User," Journal of Clinical	
	125	Chemistry, 43(5):1019-1028 (2000).		
	126	Sällberg et al., "Characterization of humoral and CD4+ cellular responses after genetic immunization with retroviral vectors expressing different forms of the hepatitis B virus core and e antigens," <i>Journal of Virology</i> , 71:5295-5303 (1997).		
	127	No. 09/929,955, filed August 15, 2001.		
	128	Sallberg, "A Hepatitis C Virus Non-Structural NS3/4A Fusion Gene," U.S. Patent Application Serial No. 09/930,591, filed August 15, 2001.		
	129	No. 10/104,966, filed March 22, 2002.		
	130	in HIV-Infected Homosexual Men," Journal of Acc	pic Effects of Combination Therapy with Ribavirin and Isoprinosine quired Immune Deficiency Syndromes, 3(5):485-492 (1990).	
	131	Science, 177(50):705-706 (1972).	f Virazole: 1-beta-D-ribofuranosyl-1,2,4-triazole-3-carboxamide,"	
	132	Mutations Within the Polyhedrin Gene," Journal of Virology, 46:584 (1983).		
	133	as a Virologic Marker," Journal of Infectious Dise		
V		Szybalska and Szybalska, "Genetics of Human C Biochemical Trait," Proc Natl Acad Sci USA, 48:2	cell Lines, IV. DNA-Mediated Heritable Transformationof a 026 (1962).	
XAMINER		$\mathcal{B}(\mathcal{C})$	DATE CONSIDERED 121 / 201	

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 608; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
BC	135	Takeda et al., "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences," <i>Nature</i> , 314:452-454 (1985).
	136	Tam et al., "The Immunomodulatory effects of ribavirin: Recent findings," International Antiviral News, 7/6:99 – 100 (1999) (ABSTRACT).
	137	Tam et al., "Ribavirin Polarizes Human T Cell Responses Towards a Type 1 Cytokine Profile," <i>Journal of Hepatology</i> , 30(3):376-382 (1999).
	138	Tan et al., "How hepatitis C virus counteracts the interferon response: the jury is still out on NS5A," Virology, 284(1):1-12 (2001).
	139	Vaitukaitis et al., "A method for producing specific antisera with small doses of immunogen," J. Clin. Endocrinology Metab., 33(6):988-991 (1971).
	140	Walsh et al., "Update on chronic viral hepatitis", Postgrad Medical Journal, 77(910):498-505 (2001).
	141	Wang et al., "Synthesis and Cytokine Modulation Properties of Pyrrolo[2,3,-d]-4-pyrimidone Nucleosides," J. Med. Chem., 43(13):2566-2574 (2000).
	142	Zhang et al., "Characterization of a monoclonal antibody and its singl-chain antibody fragment recognizing the nucleoside triphosphatase/helicase domain of the hepatitis C virus nonstructural 3 protein," Clin. Diagn. Lab. Immunol., 7(1):58-63 (2000).
		Zhang et al., "Interferon-α Treatment Induces Delayed CD4 Proliferative Responses to the Hepatitis C Virus Nonstructural Protein 3 Regardless of the Outcome of Therapy," <i>The Journal of Infectious Diseases</i> , 175:1294-1301 (1997).
	144	Zhang et al., "Molecular basis for antibody cros-reactivity between the hepatitis C virs core protein and the hos- derived GOR protein," Clin. Exp. Immunol., 96(3):403-409 (1994).
V	145	http://www.msi.com/life/products/cerius2/modules/analogbuilder.html, C2Analog Builder, July 6, 2000.

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EXAMINER Bagan ! DATE CONSIDERED 02/21/2006